Analgesia in patients with acute abdomen

To the Editor,

We applaud the recent review by Brewster et al¹ that sought to shatter the medical myth that analgesia should be withheld in patients with an acute abdomen in the interest of facilitating accurate and timely diagnosis. Patients with abdominal pain from various causes have long been denied the relief from suffering due them because of widespread misconceptions associated with the use of opioids. We have personally given these drugs safely to scores of patients suffering from acute abdominal pain. In doing so, we have applied several caveats that may bear mentioning and are probably deserving of further study.

In evaluating patients with abdominal pain, it is important not to treat all the same. Many discussions consider both abdominal pain and tenderness equally; this grouping is probably not valid. In addition, some discussions consider pain that can be localized to the right upper quadrant, the right lower

quadrant, the flank, or the pelvis equal to pain that cannot be localized at all. This can also lead to difficulties, especially if a logical approach to evaluating such patients is not followed. In processes in which inflamed visceral peritoneum is or can be made to come in contact with parietal peritoneum—such as later stage appendicitis, cholecystitis, or salpingitis-treatment with analgesics is likely to reduce or even eliminate the complaint of pain (the very reason the analgesic has been given) but will not completely eliminate localizing physical findings.²⁻⁶ The initial complaint and physical examination will provide guidance as to which patients fall into this group. On the other hand, pathologic processes not characterized by inflammation of the visceral peritoneum, those that are not well localized on examination and that typically produce pain out of proportion to physical findings—including pancreatitis, ischemic bowel, and bowel obstruction—are more likely to be obscured by the administration of opioid analgesics. In such patients, because the physical examination was not useful in the first place, the elimination of subjective complaints can cause difficulties. Although opioids should still be given to such patients, a high index of suspicion must be maintained for disease processes manifest mainly by pain rather than tenderness.

A recent case of which we are aware is illustrative. A middle-aged woman presented to an emergency department with "10 out of 10" epigastric pain, so severe at the outset that she was literally unable to speak to the paramedics who transported her to the hospital. The patient was appropriately treated with intravenous opioid analgesia, and a workup was initiated. At the change of shift several hours later, the oncoming physician noted a moderately elevated amylase level, but the patient was nearly painfree. The physician subsequently canceled an abdominal series that had been ordered and promptly discharged the patient. About 30 hours later, the patient returned in severe pain, hypotensive, and clinically dehydrated. Physical and radiographic examinations revealed dehydration, acidosis, and air-fluid levels, and the patient was discovered during surgery to have extensive bowel necrosis attributable to mesenteric ischemia. Among the mistakes made during the first visit was that once the patient's ability to subjectively sense poorly localized pain was diminished (the therapeutic goal of administering the opioid). it became *more* important than it had been to consider abnormal laboratory findings, perform radiographs, and carefully observe the patient, and this was not done.

The simultaneous goals of achieving analgesia and arriving at an accurate diagnosis are clearly both achievable. However, doing so may require more diagnostic studies and/or more observation time than might otherwise be necessary (such would seem to be the case when treating not only patients with an acute abdomen but also those with blunt abdominal trauma or multiple trauma and head injury). Brewster and colleagues make reference to this in stating that "the traditional teaching of withholding pain medication in patients with acute abdominal pain stems from a time when medicine was without modern diagnostic techniques." Fortunately, we have advanced greatly from that time. Future research should differentiate patients with various presentations of abdominal pain and seek to guide us as to optimal laboratory and imaging studies that should be obtained in conjunction with the administration of analgesic medication.

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